



Research Data Exchange Release 2.0

Real-Time Data Capture and Management Program

RDE Website

U.S. Department of Transportation
Federal Highway Administration

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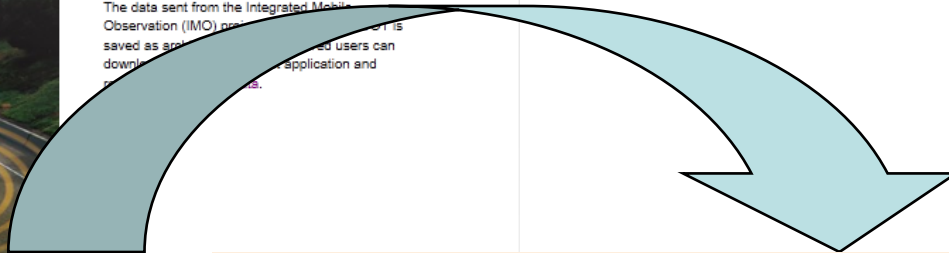
www.its-rde.net/



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The data sent from the Integrated Mobile Observation (IMO) project is saved as application files that users can download to their application and...



Data Environments

9 items found, displaying all items.

Title	Start Date	End Date	Description	Data Sets	Total Size
FDOT Orlando ITS World Congress	2010-09-01	2010-10-22	The Florida Department of Transportation (FDOT) data environment contains data recorded by Vehicle Awareness Devices (VADs) on Lynx transit buses in Orlando FL. The VADs started operation in September 2011 and continued operation during the ITS World Congress in October 2011. The contents of the recorded data include the required components of the J2735 Basic Safety Message (BSM).	2	974.0 MB
Leesburg VA Vehicle Awareness Device	2012-10-18	2012-12-19	The files in this data environment were produced by the Vehicle Awareness Device (VAD) installed on one test vehicle over a two month period. Activities included numerous repetitive trips in and around Leesburg VA and one long road trip from Ann Arbor, MI to Leesburg, VA by way of eastern Indiana. The VAD installed in the test car is identical to the VADs installed in over 2800 vehicles participating in the Safety Pilot Model Demonstration in Ann Arbor, MI.	3	534.0 MB
NCAR 2009	2009-04-06	2009-04-22	See the Vehicle Infrastructure Initiative Proof of Concept data environment for a description of the Michigan Test Bed and the data collected there in 2008. In April 2009 a second set of trials was conducted at the Michigan Test Bed, directed by the National Center for Atmospheric Research (NCAR). These trials used a smaller set of vehicles, and concentrated on collecting data during periods of rainy or snowy weather. RSE data for the NCAR 2009 tests were available for nine days in April 2009. The data in this data environment consists of RSE and OBE data for the six days with the most good data.	8	825.8 MB
NCAR 2010	2010-01-28	2010-03-29	See the Vehicle Infrastructure Initiative Proof of Concept data environment for a description of the Michigan Test Bed and the data collected there in 2008. In late January through early April 2010 a third set of trials was conducted at the Michigan Test Bed, again directed by the National Center for Atmospheric Research (NCAR). These trials used a small set of vehicles, similar to the trials in 2009, and concentrated on comparing atmospheric data from vehicle-mounted sensors to data from a nearby fixed weather observing station. The 2010 data selected for inclusion in this data environment consists of RSE and OBE data for the six days with the most good data.	8	465.8 MB
Pasadena	2011-09-01	2011-10-31	The Pasadena data environment covers the diverse roadway network in and around the City of Pasadena, California. The data was collected in 2011 during the months of September and October. The data environment includes a variety of data sets including network data (highway network file), demand data (trip tables), network performance data (link volumes, turn volumes, speeds and capacity), work zone data, weather data, Closed Circuit Television (CCTV) camera data, and Changeable Message Sign (CMS) data. Data from simulations are included where there are no sensors, and to provide forecasts.	37	347.9 GB

WELCOME TO THE RESEARCH DATA EXCHANGE

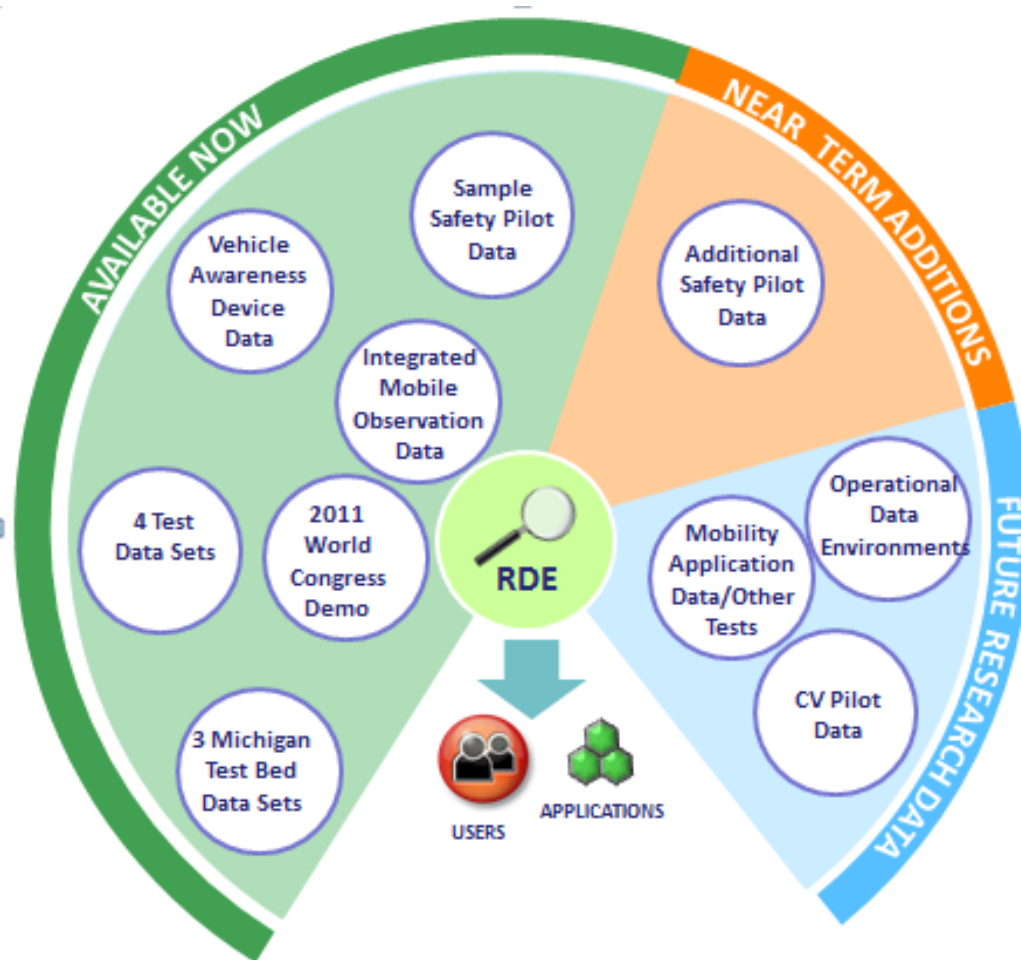
The Research Data Exchange (RDE) is developed as a transportation data sharing system that promotes sharing of both sources (including vehicle probes) and multiple modes. This new data sharing capability will better support the needs reducing costs and encouraging innovation.

The primary purpose of the DCM (Data Capture and Management) Research Data Exchange is to provide a variety of development, testing, and demonstration of multi-modal transportation mobility applications being pursued under the DCM (DMA) Program and other connected vehicle research activities. Data accessible through the Research Data Exchange will be the public. The vision of the DCM Program is to enhance current operational practices and transform future transportation acquisition and systematic provision of integrated data from infrastructure, vehicles, and travelers. This data is available to others.



U.S. Department of Transportation
ITS Joint Program Office

RDE Content



What is included in the RDE

- Real-time and Archived Data
- Probe Data from Field Tests
- Data from Research Projects including simulations
- Advanced Search Capabilities
- Multiple File Download Capability
- FAQs
- External Links
- Contact Information
- Standard Metadata documentation



New Data on the RDE for Release 2.0

Integrated Mobile Observation (IMO) Data

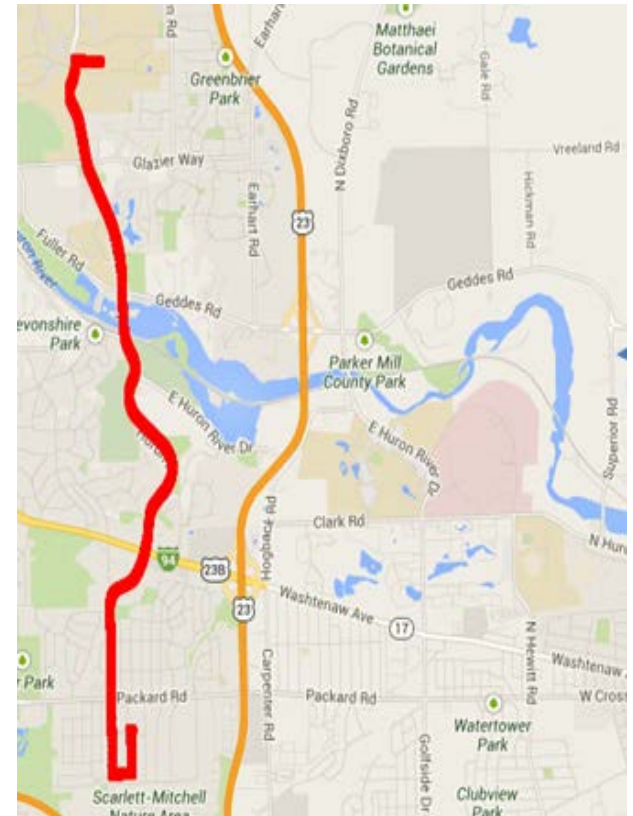
- Real-time and archived data from Minnesota DOT maintenance vehicles
- Contains location data, road weather observations from vehicle-mounted sensors, and engine data directly from the vehicles' CAN bus.
 - In archive mode, users may download files containing all records collected within a certain time interval.
 - In real-time mode, an application may be downloaded from the RDE that enables the user to receive the data records in real-time directly from the RDE.



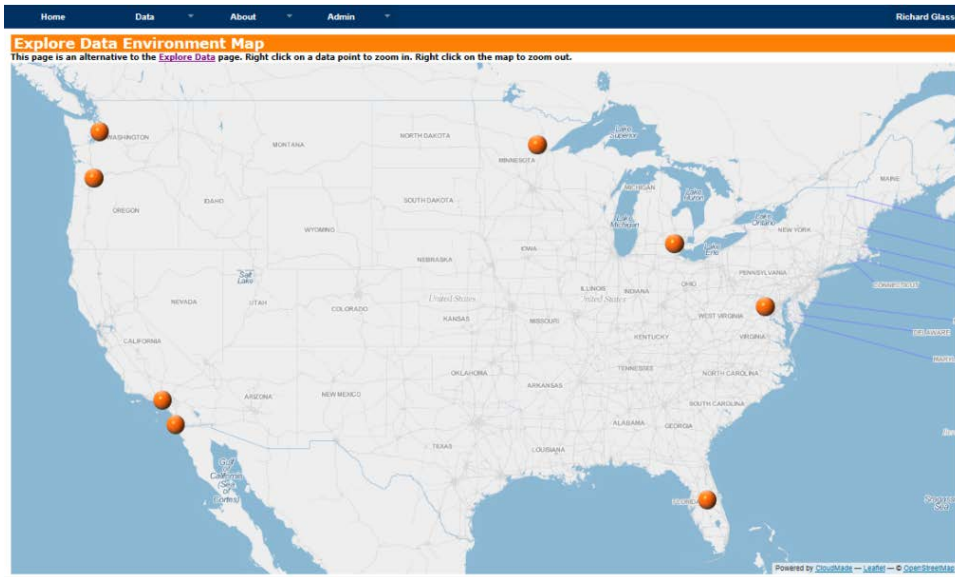
Safety Pilot Model Deployment Data

Connected Vehicle Data (One-Day Sample) from Ann Arbor, MI

- Data from vehicles with vehicle awareness devices, aftermarket safety devices, retrofit safety devices, and integrated safety devices
- Messages sent and received by Roadside Equipment (RSEs)
- Basic Safety Messages (BSM) defined in the SAE J2735 standard.
- The primary contents of BSM files include:
 - Position (latitude, longitude, elevation)
 - Transmission status
 - Speed and heading
 - Lateral, longitudinal, and vertical acceleration
 - Brake system status, ABS status, traction control status



New Features of the RDE for Release 2.0



- The user interface has been upgraded.
- The RDE now features a “shopping cart” model to download of multiple files as a zip file.
- The download confirmation text now provides an estimate of the download file size.
- Updated "Frequently Asked Questions" (FAQs).
- Users can now subscribe to receive emailed news of RDE-related updates and feedback opportunities.
- Data environments may be viewed and accessed via a map-based interface.

For more information ...

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